BOX DETECTOR IN BARCODE ENVIRONMENT

ABSTRACT OF THE DISCLOSURE

A system where boxes (12) move along a conveyor belt and a bar code scanner reads bar codes (20) on the boxes and detects the presence of a box (with or without a readable barcode), which facilitates establishing a box detector that detects the leading edge of a box. The bar code scanner has a scanning laser beam source (30) that directs a scanning laser beam (32) at the path of bar codes on the boxes, and a sensor (44) that detects reflections of the laser beam, so the output from the sensor can be used by a bar code reader (52) to read bar codes. Instead of setting up a separate box detector, the output from the laser reflection sensor is delivered to a container detecting circuit (102) that uses the output of the laser reflection sensor to detect the leading edge of the box. The container detecting circuit detects a rapid increase in output from the sensor from a level (122) obtained when no box is present to a level B3 commonly exceeded by an ordinary box surface, with the circuit constructed to avoid false detections resulting from black or brown bars elements interspersed with highly reflective space elements of a bar code.